

### **REMARKS**

Amendments to the claims overcome the claim objections and rejections on pages 1-4 of the Office Action. Applicant traverses the 112 rejection, because paragraph [0020] clearly discloses a non-metallic material realized with a GFK and/or a CFK material. Therefore, both GFK and CFK may be present at the same time. Thus, the combination of GFK and CFK is enabled.

Westre et al. fails to teach or suggest carbon fibers coated with a nitride bond or carbide bond embedded in a metal or a ceramic with glass fibers or ceramic fibers, as recited in claim 17, as amended. Furthermore, none of the cited references teach or suggest any combination of carbon fibers with glass fibers or ceramic fibers in a composite material. Therefore, amended claim 1 is nonobvious over the cited references.

Under point 9 of the Office Action, the Examiner alleges that by combining Westre et al and Lawlor the feature of coating carbon fibers with silicon carbide is disclosed. However, a person skilled in the art would not combine the two documents because they relate to completely different applications, and there is no expectation of success in combining the two references. While Westre et al is directed to skin panels of an aircraft, Lawlor describes the structures of a rotor for power generation. These materials are as different as can be imagined. The forces which act upon a skin panel are completely different from the forces acting on a supersonic rotor (col. 3, lls 15, 16). Therefore, the design requirements of the materials of the panels are completely different from the requirements of the rotor materials. Thus, a person skilled in the art would not combine the disclosure of Westre et al with Lawlor in the way suggested.

Moreover, the combination recited in claim 17 is neither taught nor suggested in the references, taken alone or in combination. When Westre et al. is combined with Lawlor, the elements of amended claim 17 are not achieved. Lawlor suggests the silicon carbide coating only in combination with a high performance metal matrix composite (col. 33; ll. 31, 32). Thus, when combining Westre et al with Lawlor the person skilled in the art would arrive at a material having only carbon fibers with silicone carbide coated in a metal matrix. The

combination of carbon fibers and glass fibers or ceramic fibers is neither taught nor suggested in either of the cited references, whether taken alone or in combination.

No new matter is entered by any of the amendments, which put the claims in condition for allowance. Claim 17 recites: "... the exterior skin is a hybrid material capable of being molded and joined by further processing, wherein the composite material comprises combinations of carbon fibers with glass fibers or ceramic fibers, and the carbon fibers are coated with a nitride or a carbide bond and are embedded in a metal or a ceramic," as amended. Nothing in the cited references, even if taken in combination, teaches or suggests all of the these limitations, because nothing in the cited references teaches or suggests combinations of carbon fibers with a nitride or carbide bond combined with glass fibers or ceramic fibers embedded in a metal or ceramic. Therefore, the Applicant respectfully requests reconsideration and allowance of the amended claims.

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Respectfully submitted,



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